	CRE Processing Oalo: //o/2 or
Н	umbor: 10.0/6,993  Edited by: Vorland by: Vorland by: Vorland by:
	Changed a file from non-ASCII to ASC ENTERED  Changed the margins in cases where the sequence text was "wrapped" down to the next line.
	• • • • • • • • • • • • • • • • • • • •
	Edited a format error in the Current Application Data section, specifically:
	Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other
	Added the mandatory heading and subheadings for "Current Application Data".
	Edited the 'Number of Sequences' field. The applicant spelled out a number instead of using an integer.
	Changed the spelling of a mandatory field (the headings or subheadings), specifically
,	Corrected the SEO ID NO when obviously incorrect. The sequence numbers that were edited were:
ı	nserted or corrected a nucleic number at the end of a nucleic line. SEO ID NO's edited:
0	Corrected subheading placement. All responses must be on the same line as each subheading. If the paper population of the properties of th
Į	Inserted colons after headings/subheadings. Headings edited included:
 	Deleted extra, invalid, headings used by an applicant, specifically:
ı	Deletod: Mon-ASCII garbago at the beginning/end of files: secretary initials/filename at end of file page numbers throughout text; other invalid text, such as
J	nserted mandatory headings, specifically:
(	Corrected an obvious erro: in the response, specifically:
-	dited identifiers where upper case is used but lower caso is required, or vice versa.
	Corrected an error in the Number of Sequences field, specifically:
^	"Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
De du	loted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error to a Patentin bug). Sequences corrected:
	Other:
_	

Examiner: The above corrections must be communicated to the applicant in the first Office Action! DO NOT send a copy of this form.

OIPE

RAW SEQUENCE LISTING DATE: 01/10/2002 PATENT APPLICATION: US/10/016,993 TIME: 08:53:21

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01102002\J016993.raw

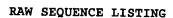
```
4 <110> APPLICANT: Wiles, Michael V.
          Baribault, Helene
  6
          Zhang, Qin
  8 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING ALPHA
          ENDOSULFINE GENE DISRUPTIONS
 12 <130> FILE REFERENCE: R-948
> 14 <140> CURRENT APPLICATION NUMBER: US/10/016,993
 15 <141> CURRENT FILING DATE: 2001-12-13
 17 <150> PRIOR APPLICATION NUMBER: US 60/256,195
 18 <151> PRIOR FILING DATE: 2000-12-13
 20 <160> NUMBER OF SEQ ID NOS: 7
 22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 366
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Mus musculus
 29 <400> SEQUENCE: 1
 30 atgtcccaga aacaagaaga agaaaaccct gcggaggaga ccggcgagga gaagcaggat 60
 31 acacaggaga aagaagggat totoootgag aaagotgagg aggcaaagot aaaggccaaa 120
 32 tacccaagee taggacaaaa geetggagge teegaettee teatgaagag actecagaaa 180
 33 gggcaaaagt actttgactc aggagactac aacatggcca aagccaagat gaagaacaag 240
 34 cagetgecaa gtgcaggage agacaagaac etggtgaceg gtgaceacat ecceaceca 300
 35 caggatetge eccagagaaa gteetegete gteaccagea agettgeggg tggecaagtt 360
 36 gaatga
 38 <210> SEQ ID NO: 2
 39 <211> LENGTH: 121
 40 <212> TYPE: PRT
 41 <213> ORGANISM: Mus musculus
 43 <400> SEQUENCE: 2
 44 Met Ser Gln Lys Gln Glu Glu Glu Asn Pro Ala Glu Glu Thr Gly Glu
 45 1
 46 Glu Lys Gln Asp Thr Gln Glu Lys Glu Gly Ile Leu Pro Glu Lys Ala
                20
 48 Glu Glu Ala Lys Leu Lys Ala Lys Tyr Pro Ser Leu Gly Gln Lys Pro
 49
 50 Gly Gly Ser Asp Phe Leu Met Lys Arg Leu Gln Lys Gly Gln Lys Tyr
                            55
 52 Phe Asp Ser Gly Asp Tyr Asn Met Ala Lys Ala Lys Met Lys Asn Lys
 53 65
                        70
                                             75
 54 Gln Leu Pro Ser Ala Gly Ala Asp Lys Asn Leu Val Thr Gly Asp His
                    85
                                         90
 56 Ile Pro Thr Pro Gln Asp Leu Pro Gln Arg Lys Ser Ser Leu Val Thr
                100
                                    105
 58 Ser Lys Leu Ala Gly Gly Gln Val Glu
 59
            115
 62 <210> SEQ ID NO: 3
 63 <211> LENGTH: 121
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RAW SEQUENCE LISTING DATE: 01/10/2002 PATENT APPLICATION: US/10/016,993 TIME: 08:53:21

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01102002\J016993.raw

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64 <212> TYPE: PRT
 65 <213> ORGANISM: Homo sapiens
 67 <400> SEQUENCE: 3
 68 Met Ser Gln Lys Gln Glu Glu Glu Asn Pro Ala Glu Glu Thr Gly Glu
 70 Glu Lys Gln Asp Thr Gln Glu Lys Glu Gly Ile Leu Pro Glu Arg Ala
                20
                                    25
 72 Glu Glu Ala Lys Leu Lys Ala Lys Tyr Pro Ser Leu Gly Gln Lys Pro
            35
 74 Gly Gly Ser Asp Phe Leu Met Lys Arg Leu Gln Lys Gly Gln Lys Tyr
76 Phe Asp Ser Gly Asp Tyr Asn Met Ala Lys Ala Lys Met Lys Asn Lys
 77 65
78 Gln Leu Pro Ser Ala Gly Pro Asp Lys Asn Leu Val Thr Gly Asp His
 79
                    85
                                        90
80 Ile Pro Thr Pro Gln Asp Leu Pro Gln Arg Lys Ser Ser Leu Val Thr
                100
                                    105
 82 Ser Lys Leu Ala Gly Gly Gln Val Glu
           115
86 <210> SEQ ID NO: 4
87 <211> LENGTH: 117
88 <212> TYPE: PRT
89 <213> ORGANISM: Homo sapiens
91 <400> SEQUENCE: 4
92 Met Ser Gln Lys Gln Glu Glu Glu Asn Pro Ala Glu Glu Thr Gly Glu
93 1
                                        10
94 Glu Lys Gln Asp Thr Gln Glu Lys Glu Gly Ile Leu Pro Glu Arg Ala
96 Glu Glu Ala Lys Leu Lys Ala Lys Tyr Pro Ser Leu Gly Gln Lys Pro
97
                                40
98 Gly Gly Ser Asp Phe Leu Met Lys Arg Leu Gln Lys Gly Gln Lys Tyr
                           55
100 Phe Asp Ser Gly Asp Tyr Asn Met Ala Lys Ala Lys Met Lys Asn Lys
                        70
102 Gln Leu Pro Ser Ala Gly Pro Asp Lys Asn Leu Val Thr Gly Asp His
                    85
                                         90
104 Ile Pro Thr Pro Gln Asp Leu Pro Gln Arg Lys Ser Ser Leu Val Thr
                100
106 Ser Lys Leu Ala Gly
107
            115
110 <210> SEQ ID NO: 5
111 <211> LENGTH: 83
112 <212> TYPE: DNA
113 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: RACE sequence
118 <400> SEQUENCE: 5
119 tcggttaaaa acgtcacggg cttgagccgc cattttgact gagcaaccat agtgatagga 60
120 gccgtagcat tagctcaggt tgt
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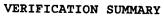
PATENT APPLICATION: US/10/016,993

DATE: 01/10/2002 TIME: 08:53:21

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01102002\J016993.raw

- 122 <210> SEQ ID NO: 6 123 <211> LENGTH: 200
- 124 <212> TYPE: DNA
- 125 <213> ORGANISM: Artificial Sequence
- 127 <220> FEATURE:
- 128 <223> OTHER INFORMATION: Targeting Vector
- 130 <400> SEQUENCE: 6
- 131 gcaaaaatac caaagcttgc tgtcctgccc ctaaggtcca tgcaggcttt taattggttc 60
- 132 tgtggctcac tetetttece ggttggtgtt ctagettgcc tgtcgctcta aagaatccgc 120
- 133 ccacctccgg ccaacgetta ttggtgtgtc gttacatcat tgccccgtca agcccactct 180
- 134 cattggctct cataggaggg
- 136 <210> SEQ ID NO: 7
- 137 <211> LENGTH: 200
- 138 <212> TYPE: DNA 139 <213> ORGANISM: Artificial Sequence
- 141 <220> FEATURE:
- 142 <223> OTHER INFORMATION: Targeting Vector
- 144 <400> SEQUENCE: 7
- 145 ggcggtctca acgtcacggg cttgagccgc cattttgact gagcaaccat agtgacagga 60
- 146 gccgtagcag cagctcaggt tgtccccgtt tcccctccc cttccctttt ccggctgact 120
- 147 teceggacee tgcattacae agteceggtt etgecatgte ecagaaacaa gaagaagaaa 180
- 148 accetgegga ggagacegge 200



PATENT APPLICATION: US/10/016,993

DATE: 01/10/2002 TIME: 08:53:22

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01102002\J016993.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

OIPE

RAW SEQUENCE LISTING

DATE: 01/03/2002

PATENT APPLICATION: US/10/016,993

TIME: 13:07:20

Input Set : A:\R-948 Sequence listing for submission.txt

Output Set: N:\CRF3\01032002\J016993.raw

4 <110> APPLICANT: Wiles, Michael V.

Baribault, Helene

6 Zhang, Qin

8 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING ALPHA ENDOSULFINE GENE DISRUPTIONS

Does Not Comply Corrected Diskette Needed

12 <130> FILE REFERENCE: R-948

24 <140> CURRENT APPLICATION NUMBER: US/10/016,993

15 <141> CURRENT FILING DATE: 2001-12-13

17 <150> PRIOR APPLICATION NUMBER: US 60/256,195

18 <151> PRIOR FILING DATE: 2000-12-13

20 <160> NUMBER OF SEQ ID NOS: 7

22 <170> SOFTWARE: FastSEQ for Windows Version 4.0

## ERRORED SEQUENCES

136 <210> SEQ ID NO: 7

137 <211> LENGTH: 200

138 <212> TYPE: DNA

139 <213> ORGANISM: Artificial Sequence

141 <220> FEATURE:

142 <223> OTHER INFORMATION: Targeting Vector

144 <400> SEQUENCE: 7

145 ggcggtctca acgtcacggg cttgagccgc cattttgact gagcaaccat agtgacagga 60

147 teceggacce tgcattacae agteceggtt etgecatgte ceagaaacaa gaagaagaaa 180

148 adcctgcgga ggagaccggc

E--> 149 (1)

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/016,993

DATE: 01/03/2002

TIME: 13:07:21

Input Set : A:\R-948 Sequence listing for submission.txt

Output Set: N:\CRF3\01032002\J016993.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:149 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:200 SEQ:7